Appl. No.: 10/084568
Amdt. Dated: May 13, 2004
Reply to Office Action of: February 13, 2004

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims:

1-34 Canceled

35. A protection switch in a node of a two-fiber optical channel shared protection ring, the node including a plurality of primary clients and a plurality of pre-emptible clients, each fiber in the two-fiber optical channel shared protection ring propagating at least one working wavelength channel dedicated to primary client traffic and at least one protection wavelength channel which may accommodate extra client traffic, the protection switch comprising:

an optical signal monitor coupled to the two-fiber optical channel shared protection ring, the optical signal monitor being operative to detect a fault condition in the two-fiber optical channel shared protection ring; and

a plurality of electronic switch fabrics in communication with said optical signal monitor, and structured and arranged to be capable of switching a primary client's transmission signal from a working wavelength propagating on a first fiber of the two fibers to a protection wavelength propagating on a second fiber of the two fibers, and of switching the primary client's receive signal from a working wavelength propagating on the second fiber to a protection wavelength propagating on the first fiber, upon a detection of a fault condition by said optical signal monitor.

36. The switch of claim 35 wherein the optical signal monitor is operative to detect multi-wavelength channel failures in the two-fiber optical channel shared protection ring.

37. The switch of claim 35 wherein the optical signal monitor is operative to detect single wavelength channel failures in the two-fiber optical channel shared protection ring.

38. The switch of claim 35 wherein the optical signal monitor is operative to detect multi-wavelength channel failures and single wavelength channel failures in the two-fiber optical channel shared protection ring.

39. The switch of claim 38 wherein each switch fabric of the plurality of modular switch fabrics is structured so as to be capable of multiple states, said states including a ring switch mode that is responsive to a multi-wavelength channel failure and a span switch mode that is responsive to a single wavelength channel failure.

40. The switch of claim 35 wherein each switch fabric of the plurality of switch fabrics is structured so as to be capable of multiple states, said states including a ring switch mode that is responsive to a multi-wavelength channel failure and a span switch mode that is responsive to a single wavelength channel failure.